

ABSTRACT

The invention describes a product and a method for generating electrical power directly from nuclear power. More particularly, the invention describes the use of a liquid semiconductor as a means for efficiently converting nuclear energy, either nuclear fission and/or radiation 5 energy, directly into electrical energy. Direct conversion of nuclear energy to electrical energy is achieved by placing nuclear material in close proximity to a liquid semiconductor. Nuclear energy emitted from the nuclear material, in the form of fission fragments or radiation, enters the liquid semiconductor and creates electron-hole pairs. By using an appropriate electrical circuit an electrical load is applied and electrical energy generated as a result of the creation of the 10 electron-hole pairs.